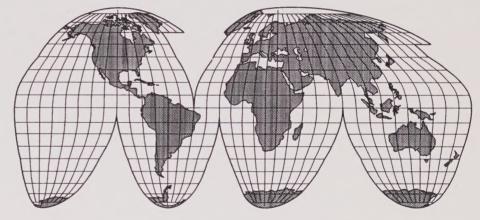
A Symposium of the Association of Bay Area Governments

Competing in a World Economy: Bay Area 2010

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Projections 94 Symposium

Tuesday, December 14, 1993



Competing in a World Economy: Bay Area 2010

A Long-term Growth Forecast of Population, Employment, Labor Force, Income, and Households

Tuesday, December 14, 1993 MetroCenter Auditorium • 101 Eighth Street • Oakland, California

8:30 a.m. Registration and Coffee

9:00 a.m. Using ABAG's Projections 94: An Overview Gary Binger, ABAG Planning Director

9:15 a.m. New Paradigm: Can the Bay Area Adjust to the New Economics?

Raymond J. Brady, ABAG Research Director

Population Employment
Historical Trends Historical Trends
Top Growth Areas

Top Growth Areas Projected Job Hot Spots

Changing Ethnic Structure Structural Changes in the Economy

10:15 a.m. Break

10:30 a.m. Lay of the Land: Local Plans and Development Policies

Janet McBride, ABAG Senior Planner

Development Potential in the Nine Counties

Land Supply and Expected Demand Departures from Historic Trends

Highlights of Growth Levels and Rates
Housing Supply: a Link to Economic Vitality
Policy Issues: Options for Future Crowth

Policy Issues: Options for Future Growth

11:15 a.m. Challenges and Obstacles Ahead

Raymond J. Brady

Changing the Way We Think: Managing a Turbulent Future Achieving More Housing: More Land or More Intensive Use

The Budget Crisis: It Won't Go Away!

Planning Should Respond to a Changing World Economy

11:45 a.m. Summation

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Speaker Biographies

Competing in a World Economy: Bay Area 2010

A Long-term Growth Forecast of Population, Employment, Labor Force, Income, and Households

Gary Binger, Planning Director for the Association of Bay Area Governments, is responsible for directing a comprehensive planning program which includes research and recommendations on demographic, economic, land use and growth issues. Mr. Binger was previously Community Development Director and Chief of Planning for the City of Walnut Creek, California, and Planning Director for the City of Del Mar, California. He is a member of the American Institute of Certified Planners, the Urban Land Institute, and has been on the Board of Directors of the California Redevelopment Agencies Association. He has also served as Executive Director of the Bay Area Planning Directors' Association. He lectures for the University of California's public policy extension programs. Formal education includes a Bachelor of Architecture degree, graduate planning study at the University of Manchester, England, and a Master's in Urban Planning from the University of Washington.

Raymond J. Brady, Research Director, Analytical and Information Services, is responsible for analytical support services and systems modeling for the Association of Bay Area Governments. His responsibility consists of the maintenance and expansion of information services, economic, demographic, and land use models, and the design of new systems required in the support of other programs in the agency. Before coming to ABAG, he worked in research groups at the University of Minnesota and the University of New Mexico and for a private environmental engineering consulting firm. Dr. Brady has authored several publications. Dr. Brady has taught quantitative methods at the University of California, Berkeley. He has an economics degree from Louisiana State University. and a planning degree from the University of Arizona. He received his doctorate in Management Systems Engineering from Tulane University.

Janet M. McBride is a Senior Planner with the Association of Bay Area Governments. She manages ABAG's data base of planned land uses. The Local Development Policy Survey data base was most recently updated in 1993. Survey results were incorporated into the ABAG projections system for Projections 94 and into ABAG's regional land use data base. Since coming to ABAG in 1990, Ms. McBride has authored research publications and policy position papers. and conducted special planning studies related to regional land use, housing, growth management, and the California Environmental Quality Act. Recently, she authored draft housing element reform legislation. Prior to coming to ABAG, Ms. McBride gained extensive experience in private planning and environmental consulting. Ms. McBride received a B.S. in **Environmental Policy and Analysis** Planning at U.C. Davis and a Masters in Urban Planning & Policy (M.U.P.P.) from the University of Illinois at Chicago.

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ASSOCIATION OF BAY AREA GOVERNMENTS

ABOUT ABAG

The Association of Bay Area Governments (ABAG) is one of nearly 500 councils of governments across the nation working to help solve problems in areas such as land use, housing, transportation, environmental quality, and economic development.

ABAG is owned and operated by the cities and counties of the San Francisco Bay Area. It was established in 1961 to protect local control, plan for the future, and promote cooperation on areawide issues. In recent years, ABAG has answered the needs of its members by providing low-cost services that save taxpayers millions of dollars.

The General Assembly is the overall governing body of the organization. Each member city and county designates a representative. ABAG's operations are directed by an Executive Board composed of 37 elected officials from member cities and counties. Much of ABAG's work is carried on by committees appointed by the Executive Board, including joint committees with the Metropolitan Transportation Commission and the Bay Area Air Quality Management District. Advisory committees and task forces are appointed from time to time to oversee special programs in areas such as air quality, water quality, energy, and economic development. All meetings are open to the public.

REGIONAL PLANNING

In ABAG's region there are 100 cities and the nine counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. Over 6 million people live in this 7,000-square-mile area.

Where will these people live, where will they work? Will transportation be adequate? How can we improve air and water quality? Will water supplies be sufficient? Are we prepared for a major natural disaster? These are the kinds of questions that cannot be addressed easily without cooperative action among many agencies, organizations, and the general public.

Through its role as an association of cities and counties, ABAG has been designated by the state and federal governments as the official comprehensive planning agency for the Bay Area. Its locally adopted Regional Plan provides a policy guide for planning the region's housing, economic development, environmental quality, transportation, recreation, health and safety.

One of ABAG's vital functions is to provide a forum to resolve local differences through workable compromises. Its active public information program encourages citizen involvement in planning and policy decisions. The Association also sponsors workshops and conferences where local officials, business and industry leaders, special interest groups, and private citizens can discuss programs, regulations, and legislation affecting their communities.

ABAG SERVICES

As city and county budgets are tightened in the slipknot of rising costs and diminishing income, ABAG stretches its services to ease the effect. ABAG offers cost-saving services to its members including demographic information and data analysis, capital financing, liability and property insurance, workers' compensation administration, and specialized training programs — the largest of which, HAZMACON, a hazardous materials conference, attracts 7,000 participants.

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ABAG OFFICERS AND KEY OFFICIALS

President TOM TORLAKSON Contra Costa County

Vice President PETER SNYDER City of Dublin

Immediate Past President MARY GRIFFIN San Mateo County

Legislative and Governmental Organization Committee Chair PETER SNYDER City of Dublin

Finance and Personnel Committee Chair MARY KING Alameda County

Regional Planning Committee Chair PAUL BATTISTI Napa County

Executive Director and Secretary-Treasurer REVAN TRANTER

Center for Analytical and Information Services

The Center for Analytical and Information Services (CAIS) is the research and information unit of the Association of Bay Area Governments, the regional planning agency for the nine-county San Francisco Bay Area.

CAIS provides information and analysis services to public organizations and the private sector. Population projections, demographic and economic analysis, small area market research, and identification of development constraints and potentials are just a few examples of data services that CAIS provides.

Whether you need data, personalized research, planning assistance or technical consulting, CAIS can perform these for you at a cost within your planning or marketing budget.

Please call us for more information.

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Janet McBride, MUPP	510/464-7955	Land use data and development studies
Patricia Perry, MCP, MBA	510/464-7957	1990 Census and environmental review
Hing Wong, AB	510/464-7937	Regional Planner
Chin Ming Yang, Ph.D	510/464-7925	Data files and modeling

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Projections 94 Summary

Association of Bay Area Governments

Center for Analytical and Information Services

Summary of Findings of ABAG's Projections 94

The theme of PROJECTIONS 94 is "Competing in a World Economy: Bay Area 2010." It asks us to look beyond the present and begin to think about the 21st Century. The Bay Area and California will recover from the present economic slowdown. California and the Bay Area were hard hit by the slowdown because of the unique combination of factors that converged to make this "Contained Depression" the worst since the Great Depression of the 1930s. The three major factors are: major cuts in military expenditures, disproportionately affecting California; a high cost business environment in a time when "restructuring" seeks to reduce costs, and finally, a regulatory environment that was conditioned to control economic growth.

Beyond the macro-factors that influenced the severity of the slowdown in California is the ultimate fact that the world-economy is in a "Contained Depression." The word "depression" is used because a) the economic slowdown is worldwide; b) asset values have declined on a worldwide basis; c) disinflation, not inflation, is the most serious present-day problem, and d) over-capacity in production is a worldwide problem. There is an irony to this story. Debt accumulation is a major contributor to the existing problem. However, it also provides a stimulus which reduces the potential depth of the existing slowdown. Correspondingly, the huge debt accumulated by governments, businesses, and consumers slows recovery because the "stimulus shock" of a fiscal deficit has a minimal affect on growth because the overall deficits are too large. These factors speak to why economic recovery will be slow and occur over the decade.

In summary, the economic slowdown is due to several economic and political factors converging at the same time. Debt accumulation on a worldwide basis created over-valued assets not sustainable by the real economy. The end of the cold war fundamentally altered defense expenditures, affecting thousands of industries tied into the "military-industrial complex" on a worldwide basis. The cold war's end also

affected alliances established forty years ago. It also affected business and investment patterns, and freed capital to seek the most competitive solution to profit maximization. This process will truly lead to a "global marketplace."

In short, the world is experiencing a change not seen since the Great Depression of the 1930s, and in some respects since the Industrial Revolution. These changes will bring a more economically integrated world; nations more dependent on one another will be less likely to engage in military confliction to resolve differences. This is positive. However, the down side is that societies may become more fragmented, aggravating the difference between the affluent and non-affluent. It may not be possible to completely avoid this fragmentation.

Technology and market forces will place unavoidable stress on social institutions. Rather than trying to stop this change — which is unlikely — we should learn how to manage it effectively. The keys to this process of management are age-old. These keys are: self-discipline, creativity, a supportive social environment and a communal sense of responsibility to each member of the community. The so-called "rugged individualist" — hallmark of American success of the past — will not be the best model to help us to successfully compete in a world of the 21st Century. The underlying theme of "rugged individualist" has intensified divisiveness at a time when society is increasingly intertwined. Problems of crime, antisocial behavior, homelessness, economic exploitation and environmental degradation are part of the larger malady of a society seeking a new identity: unsure of its future, and cynical about the present.

What does this mean for the Bay Area and California? Revitalizing and re-invigorating the Bay Area and California economies will be more than simply creating new jobs. It will require "restructuring" the



way we think. Thinking beyond the present and into the world of the "Bay Area: 2010" will require substantial debate, movement toward consensus, and ultimately costly investments: investments we cannot avoid, such as in education, health, and infrastructure. To assume that somehow we can use the models of the past is equivalent to building sand castles: time and the elements are certain to create havoc. The Bay Area of 2010 will be racially and ethnically very different from today. Changing demographics will have fundamental impacts on the political and social structure of our communities and test our ability to adapt to new realities. As such, these are exciting times.

Fundamental planning issues of the past still remain. What may have changed is the assumption that somehow the economy could sustain a plethora of regulations and costs without negatively affecting our capability to compete. So what are the practical issues facing us? In the public sector, the focus must be on educational quality, expanding opportunities for all our citizens, producing affordable housing, investing in transportation, and maintaining environmental quality. These factors combined create the ingredients for a labor force that can generate ideas and solutions that will maintain the long-term economic strength of the Bay Area.

Today, the fundamental problem facing local and state government in California is that public services and regulatory systems were built around the assumption of a high growth economy. Government must begin the process of "restructuring." The Bay Area and California economies have been expected to generate taxes needed to meet services and regulations that citizens demanded in a high-cost environment. Even though the Bay Area and California have a wealth of human, educational, and capital resources, the mere presence of these resources will not equate to a successful economy nor successful society. This requires a political consensus on future action, a consensus that is lacking today.

Growth does not cause congestion, overcrowding, deteriorating infrastructure, and environmental degradation. Rather, inadequate planning, poor public policies, and institutional conflicts are the primary causes. Change and tension cannot be avoided. However,

the way we manage the change and tension will determine our future. Democratic decision-making process inherently involves inefficiencies. Inherent conflict will exist among competing public policy interests; tension will also exist between citizen perceptions of what is needed and the way the economy responds to public policy constraints. Unfortunately, these conflicts can create paralysis of will. It requires thinking beyond the individual self, the special interest and requires a focus on community. This will not be easy. However, the options are clear. Without a strong economy, we cannot pay for the investments needed. And without those investments the Bay Area of 2010 may be poorer, with more conflict and less opportunity.

Given these problems, we should view the future in the context of the Chinese word "wei-chi" (pronounced way-gee). The Chinese character contains within it the concept of danger, as well as opportunity. If we view our present problems as opportunities to create a better society, we will be successful. The issue is: "Competing in a World Economy: Bay Area 2010."

Regional Findings

- Over the forecast period, the San Francisco Bay Region will add about 1.5 million new residents. The economy is expected to generate long-term economic activity that will create a demand for about 860,000 new jobs. However, the Bay Area is not expected to recover from the present economic slowdown until 1996 at the earliest. Recover is defined as returning the 1990 employment prior to the slowdown. Alameda, San Francisco and Santa Clara may take until 1998 to fully recover. Housing production will continue to lag behind demand between 1990 and 2010 despite a production level of over 546,000 new dwelling units. This is lower than potential demand for housing, but is generally reflective of local policies.
- Because of the severity of the economic slowdown, labor force growth will not become a regional issue until post-2005. The employed labor supply is expected to grow by 737,000. If the economy recovers to a normal growth path in the post-2000



period, labor force availability issues will affect the growth potential of Bay Area counties, particularly in San Francisco, San Mateo, and Santa Clara counties. Producing substantially more housing closer to jobs would protect the performance of the regional economy.

- Taxable retail sales in the Bay Area are expected to reach \$67.9 billion in constant 1990 dollars by 1996. This is a reduction \$2.6 billion from the Projections 92 forecast for the period. This is equivalent to 5.1 percent real growth between 1990 and 1996. Real taxable sales are not expected to recover to the 1990 level until 1995 in the Bay Area. Taxable sales between 1980 and 1990 grew at an annual compound rate of 1.9 percent; between 1990 and 1996, the compound growth rate is expected to be 0.8 percent. Contra Costa, Napa and Solano are expected to experience the fastest growth in taxable sales, ranging from 10.4 to 17.8 percent between 1990 and 1996.
- Regionally, more jobs will be added to the service sector during the forecast period than any other job sector. It is expected to increase by over 465,000 jobs.
- High technology manufacturing's share of total Bay Area manufacturing employment will remain constant over the period 1990 to 2010. This is a reversal of trends of the last twenty years. This share does not include aerospace manufacturing employment. As manufacturing becomes increasingly concentrated in a small number of sectors, the region's economy may be more vulnerable. This has already been demonstrated by the impacts from restructuring of the electronics and computer industries.
- High technology employment will continue to decentralize in the region, with southern Alameda County being the main beneficiary of this trend. However, the decentralization of high technology employment will not be as dramatic as that of office employment.
- By 1995, the restructuring of high technology manufacturing and the banking industry will be completed. During the early 1990s, retail and business services began the process of restructuring.

This process is expected to continue until mid-decade. By 1995, restructuring of the health care industry is expected to be well underway.

- Housing production, especially of units affordable to moderate and lower income households, and housing prices remain the most serious constraint to the economic health of the region. High housing prices have negatively affected disposable income which in turn has affected taxable sales. The reduction in real growth in taxable sales has affected local governments' tax bases and their ability to finance services and infrastructure.
- Over the period 1990-2000, the school age population is expected to increase by 253,000 or a 23 percent increase over 1990. Of this increase, 197,000 are expected in the 5-14 age cohort.

County and City Findings

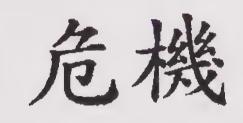
- The North Bay counties of Solano, Sonoma and Napa, as well as the East Bay county of Contra Costa consistently constitute the top four ranking positions for growth in population, households, employed residents, and jobs between 1990 and 2010.
- Solano, Sonoma and Contra Costa counties will lead the region in both population and household growth between 1990 and 2010.
 Population growth in these three counties will account for nearly 60 percent of the regions population growth.
- Napa, Solano, and Sonoma counties are expected to have the greatest percentage increase in employment demand between 1990 and 2010. Solano's employment is expected to jump by 63 percent, followed by Sonoma with a projected increase of 57 percent.
- Solano County is expected to have the greatest population increase between 1990 and 2010, increasing by about 61 percent during this period. The county's share of the region's population is expected to increase from about 5.7 percent in 1990 to 7.3 percent by 2010.



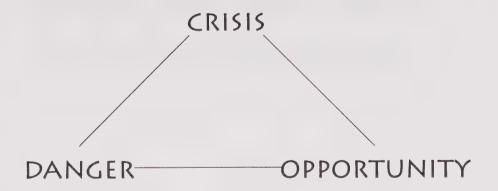
- Among the large cities in the region those having a population
 of greater than 300,000 San Jose will experience the most
 population growth (an additional 170,800 residents). San Jose is
 also expected to add more jobs than any other city.
- Among mid-size cities in the region those with a 1990 population of around 100,000 Santa Rosa and Fremont will have the highest population growth. Fremont and Santa Rosa will lead in job additions, each adding about 37,000 jobs from 1990 to 2010.
- Of the cities currently in the 50,000 to 80,000 population category, Fairfield will be adding the most new residents. In percentage terms, Fairfield and Antioch will have the greatest population growth. The two cities together are expected to add more than 120,000 new residents over the next twenty years. Combined, these communities are forecast to add 40,000 new jobs between 1990 and 2010.
- The most dramatic percentage increase in jobs will occur in medium to small cities those with an estimated 1990 population of less than 60,000. The Tri-Valley subregional study areas of Dublin, Livermore, and Pleasanton are forecast to add more than 67,000 jobs (between 1990 and 2010), or a 97 percent increase over the 1990 estimate. In 1990, these subregional study areas had 69,000 jobs. During the forecast period, San Ramon's subregional employment growth will begin to slow. It is expected to add about 19,300 new jobs between 1990 and 2010. This compares to the five-year period 1985 to 1990, when an estimated 18,300 jobs were added to San Ramon's economy.

- The Napa Airport Industrial Area is projected to have the greatest percentage increase in jobs between 1990 and 2010 in the Bay Area. Between 1990 and 2010, the expected increase in jobs is approximately 1600 percent. American Canyon, Brentwood, Windsor, and Rural East Contra Costa County are projected to be in the top four subregional study areas; all will have a substantial percentage increase in jobs over the forecast period.
- The nine-county Bay Region consists of about 4.4 million acres of land. About 3.5 million of these acres are not considered to be available for any type of development. About 658,000 acres were developed as of 1990.
- In 1990, ABAG estimated that housing occupied about 449,400 acres, with commercial and industrial development using about 190,000 acres. In 1990, based upon local development policies of all the jurisdictions in the region, ABAG estimated that about 232,000 acres were available for (1990-2010) residential development. Another 58,000 acres were found to be available for commercial and industrial use. However, the magnitude of the acres identified may be misleading as an estimate of future potential growth, because it includes acres developed since 1990. A large portion of identified available land has environmental and/or infrastructure constraints that limit its immediate use, thereby raising development costs. A significant portion of the land supply is located in areas of the region that have poorly integrated transportation systems, limited and insufficient water and sewerage systems, and inadequate general urban support services.





Pronounced "way-gee"



New Paradigm:

Can the Bay Area adjust to the New Economics?

Problems

- Insulated markets a thing of the past
- Education recent study of U.S. adults indicated a literacy rate of only 81%
- U.S. ranked 11th in the world in math proficiency for eighth graders — California ranked 39th in the U.S. in math proficiency
- Balancing economic growth and environmental quality
- Nothing is free

Constraints and Challenges

Constraints

- Getting the economy started
- Technical uncertainty
- Defensibility & objectivity
- Balancing competing objectives at the local level

Challenges

- Land use inconsistencies
- Substantial structural changes in economy
- Assuming adopted local policy changes
- Infrastructure provision in a time of fiscal uncertainty

Issues

- Moving beyond the recession
- Re-vitalizing governments' role in planning
- Forecasts and consensus

Historical Data Sources

- 1990 Census of Population and Housing
- 1981-1993 Local Policy Survey
- Bureau of Economic Analysis income data
- California Employment Development Department
- Statistical data on production / energy costs
- California Department of Finance
- 1964-1991 County Business Patterns



Regional Modelling System

Regional Economic - Demographic Model

- National Economic Projections
- Demand For Exports
- Interest Rates
- Production and Energy Costs
- Population and Labor Force Growth

Countywide Forecasting Model

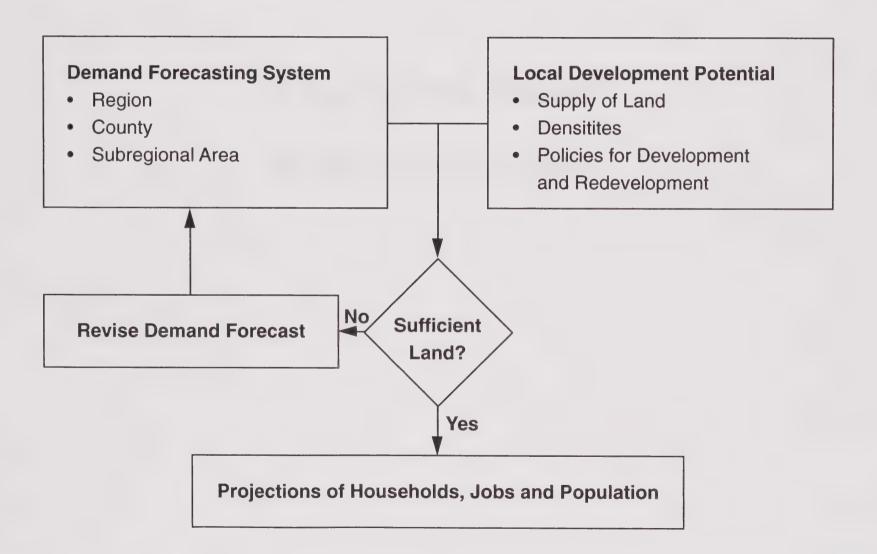
- Historical Growth Conditions
- Adjustment Due to Land Supply Constraints
- Time Series

Modelling System for Small Area Job and Population Allocation

- Optimizing Procedure
- Maximize Net Benefits
- Constrained Local Development Policies on Land, Density Level, and Potential for Housing and New Jobs



Interaction Between the Demand Forecasting Models and the Local Policy Survey



A Look at the Present Economic Slowdown

"Contained Depression"

• Slowdown is world-wide:

7 of 13 industrial nations had declining GDP this year

- Asset values have declined on a world-wide basis
- Over-capacity in production is a world-wide problem

Bay Area Economic Conditions Impact of Slowdown in Economy

	1990	1991	1992	1993	Net Change 1990 - 93
Job Change	42,600	-32,100	-93,200	-46,600	-129,300



Bay Area Economic Conditions Impact of Slowdown in Economy

1990

1993

Average Bay Area Household Income

(Real 1990 \$)

\$56,000

\$52,800

Taxable Sales

(Real 1990 \$)

\$20.6 billion

\$19.7 billion

Number of Unemployed

(August of Each Year)

94,000

228,000



Impact of Economic Slowdown on Gross Regional Product (Value of Goods and Services Produced in the Bay Area)

Given the long-term trend,
 ABAG would estimate
 1993 Bay Area GRP to be:

\$218 billion

 ABAG estimate of realized 1993 Bay Area GRP:

\$195 billion

 Potential value lost due to the economic slowdown

\$ 23 billion "lost"



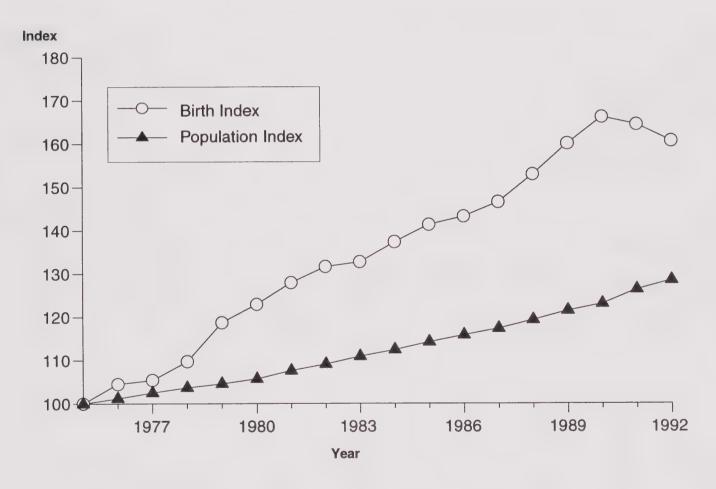
Expected year number of jobs in Bay Area will return to 1990 level

1997

Bay Area Indicators of Growth (000s)

	1990	2010
Donulation	6.001	7.500
Population Households	6,021 2,246	7,533 2,792
Employed Residents	3,152	3,889
Jobs	3,110	3,971
Mean Household Income		
in Constant 1990 Dollars	\$56,000	\$71,300
Household Size	2.61	2.64

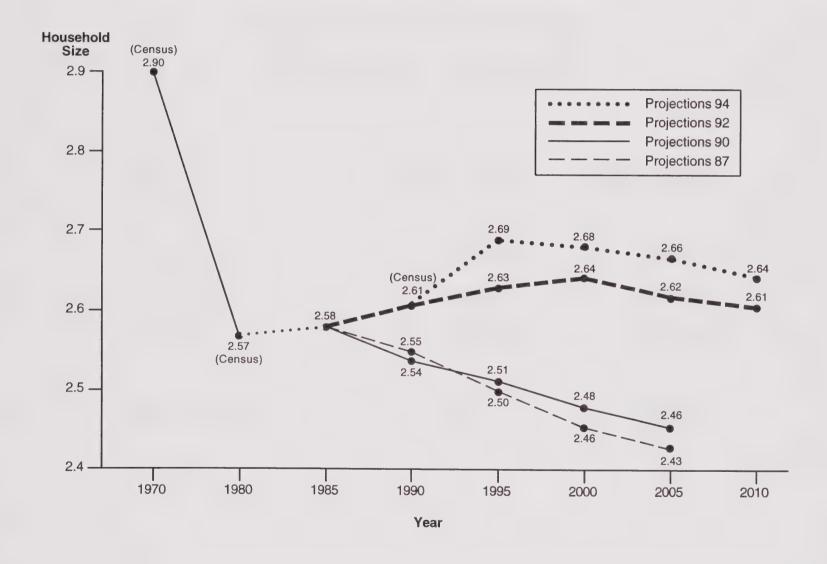
Bay Area Divergence of Birth and Population Growth Rates Comparing Birth and Population Indices*



Birth Index = Births_t divided by 1975 Births multiplied by 100.
 Population Index = Population_t divided by 1975 Population multiplied by 100.



Historical and Projected Household Size San Francisco Bay Region



Bay Area School Age Population Increase

Age	1980 - 1990	1990 - 2000
5 - 9	70,048	98,826
10 - 14	-24,028	98,407
15 - 19	-76,532	55,912
Net Change	-30,512	253,145

Labor Force Participation Has Peaked

1980

64.0

1990

67.8

1995

63.8

2000

66.5

2005

66.7

2010

67.1

Historical and Projected Labor Force Participation Rates San Francisco Bay Region

	1980	1990	2000	2010
Male	73.7	74.9	74.4	73.9
Female	54.9	60.8	58.9	60.5

Regional Job Differences by Industry for 1990 - 2010 Projections 92 and Projections 94 (000s)

Industry	Projections 92 Job Growth	Projections 94 Job Growth	Differences	
Agriculture, Forestry, Fisheries	-4	-4	0	
Mining	1	1	0	
Construction	42	37	-5	
Manufacturing	129	76	-53	
High Technology	99	42	-57	
Communications, Utilities and Transportation	n 70	58	-12	
Wholesale Trade	64	74	10	
Retail Trade	163	136	-27	
Finance, Insurance, Real Estate	29	21	-8	
Services	501	465	-36	
Business Services	284	260	-24	
Government	5	-3	-8	
Total	1,000	861	-139	



Jobs by Industry in the San Francisco Bay Region (000s)

Industry	1990	2010	Job Growth 1990 - 2010
Agriculture, Forestry, Fisheries	31	26	-5
Mining	4	5	1
Construction	166	203	37
Manufacturing	504	580	76
High Technology	269	311	42
Communications, Utilities and Transportation	190	249	59
Wholesale Trade	192	266	74
Retail Trade	520	656	136
Finance, Insurance, Real Estate	231	252	21
Services	1,013	1,478	465
Business Services	351	612	261
Government	259	256	-3
Total	3,110	3,971	861

Numbers are independently rounded.



High Technology Jobs as a Percent of All Bay Area Manufacturing Jobs

1980	49%
1985	54%
1990	53%

54%

2010

High Technology is a combination of electronics, communication equipment, computers, and instruments.

High Technology and Business Services as a Percentage of Total Jobs

1980

16.8%

1985

18.9%

1990

19.9%

2010

23.2%

Job and Labor Supply Differences for 1990 - 2010 Projections 92 and Projections 94 (000s)

County	Net Job Growth Projections 92 Projections 94		Net Employed Resident Growth Projections 92 Projections 94	
Alameda	208.5	178.9	156.8	128.1
Contra Costa	137.0	124.9	139.2	155.9
Marin	30.9	27.3	17.8	17.8
Napa	28.6	24.7	17.1	15.7
San Francisco	99.2	85.6	32.9	50.3
San Mateo	74.5	74.4	36.2	48.1
Santa Clara	244.3	182.3	173.3	155.6
Solano	92.3	75.5	97.0	90.5
Sonoma	98.3	87.4	85.1	75.1
Region	1,013.6	861.0	755.4	737.1



San Francisco Bay Area Job Distribution 1960 - 2010

County	1960	1970	1980	1990	2010
Alameda	25.2%	23.7%	20.2%	19.9%	20.0%
Contra Costa	6.9%	7.4%	7.9%	9.8%	10.8%
Marin	2.2%	2.7%	3.1%	3.3%	3.3%
Napa	1.3%	1.3%	1.4%	1.5%	1.8%
San Francisco	31.2%	25.8%	21.8%	18.7%	16.8%
San Mateo	9.2%	10.8%	10.2%	10.3%	9.9%
Santa Clara	18.0%	22.3%	27.7%	27.8%	26.4%
Solano	3.1%	2.9%	3.6%	3.8%	4.9%
Sonoma	2.9%	3.1%	4.1%	4.9%	6.1%
Dagian	4 005 000	4 705 000			
Region	1,235,200	1,705,000	2,537,860	3,110,430	3,971,380



Annual Increase in Employment (000s)

County		Historical		Pro	jected
County	1960 - 1970	1970 - 1980	1980 - 1990	1990 - 2000	2000 - 2010
Alameda	9.3	10.9	10.4	3.8	14.1
Contra Costa	4.0	7.6	10.4	3.7	8.8
Marin	1.9	3.2	2.4	0.9	1.8
Napa	0.6	1.4	1.2	1.0	1.5
San Francisco	5.5	11.2	3.0	1.3	7.2
San Mateo	7.0	7.6	5.9	4.8	2.6
Santa Clara	15.8	32.2	16.1	3.5	14.7
Solano	1.0	4.1	2.9	2.1	5.4
Sonoma	1.8	5.0	5.0	3.7	5.1
Dogion	46.0	02.0	F7.0	04.0	61.0
Region	46.9	83.2	57.3	24.9	61.2



Average Real Household Income Growth for 1980-1990 and 1990-2010

	County	1980 - 1990 Change	1990 - 2010 Change	
	Alamada	020/	250/	
	Alameda	23%	25%	
	Contra Costa	19%	20%	
	Marin	24%	41%	
	Napa	19%	30%	
	San Francisco	34%	27%	
	San Mateo	25%	33%	
	Santa Clara	22%	27%	
	Solano	18%	29%	
	Sonoma	28%	31%	
	Region	24%	27%	
- ARAC	Constant 1990 dollars			22



Impact of Economic Slowdown on Long-term Growth on Real Household Income in 2010

County	Projections 92	Projections 94	Difference
Alameda	\$64.400	¢61 400	E 9/
Alameda	\$64,400	\$61,400	-5 %
Contra Costa	73,500	71,500	-3 %
Marin	99,600	103,500	4 %
Napa	65,000	64,700	-0.4 %
San Francisco	66,700	62,900	-6 %
San Mateo	84,500	84,900	0.5 %
Santa Clara	83,300	79,600	-4 %
Solano	64,300	60,500	-6 %
Sonoma	62,700	62,900	0.3 %
Region	\$73,600	\$71,300	-3 %



Lay of the Land:
Local Plans and Development Policies

Outline

- Overview of how ABAG accounts for local land use plans and policies within Projections
- Relationship of local land use policies to ABAG's forecasts
- Focus on housing implications of trends and forecasts
- Projections in context



Local Development Policy Survey — Defined

- Data base of vacant and redevelopable land available within each community for future development
- An input to ABAG's Projections which attracts and allocates county growth to smaller areas
- Local Development Policy is defined as a principle, plan or measure concerned with the use of land
- Nearly 20,000 land unit records contain:

Acres
Future land use
Community and census tract location
Development timing (earliest expected)
Constraints, if known

Local Development Policy Survey — Defined

- Includes techniques used by local governments
 to manage the type, extent, location and rate of growth such as:
 - General and specific plans
 - Local zoning
 - Sewer hook-up moratoria,
 - Building permit allocations and growth initiatives
- First LPS conducted in 1981; consistently maintained and updated
- Most recently updated in 1993

Implications of Local Development Policies

Shifting subregional shares of developed and available land

Do current local plans accommodate expected demand?
 Residential supply and demand
 Land supply for employment activity

Jobs and employed residents
 Balances / imbalances: 1990, 2010, and 1990 - 2010



Developed Land in 1990

(000s of Acres)

County	Residential	Commercial & Industrial	Streets & Highways	Total
Alameda	76.0	43.1	4.2	123.4
Contra Costa	84.9	32.5	2.2	119.6
Marin	29.4	8.9	0.6	38.8
Napa	12.2	4.6	0.1	16.9
San Francisco	16.1	8.6	0.6	25.3
San Mateo	39.9	16.9	3.0	59.8
Santa Clara	108.4	45.2	3.0	156.5
Solano	25.7	17.2	2.7	45.6
Sonoma	56.8	12.9	2.0	71.7
Region	449.3	189.8	18.5	657.6

Numbers are independently rounded.



Available Land Supply, 1990 - 2010 (000s of Acres)

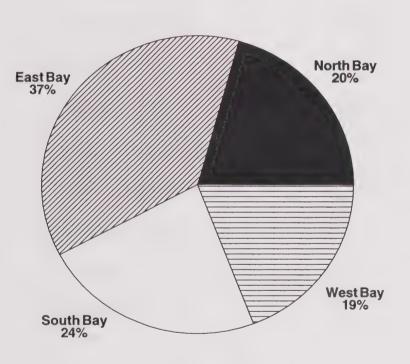
County	Residential	Commercial & Industrial	Total Available
Alameda	28.0	11.1	39.1
Contra Costa	40.4	10.6	51.0
Marin	15.8	4.5	20.3
Napa	5.1	3.3	8.4
San Francisco	0.8	0.1	0.9
San Mateo	12.6	4.0	16.6
Santa Clara	20.0	10.0	30.0
Solano	22.1	11.6	33.7
Sonoma	87.0	3.0	90.0
Region	231.9	58.1	290.0

Numbers are independently rounded. Includes redevelopable land.

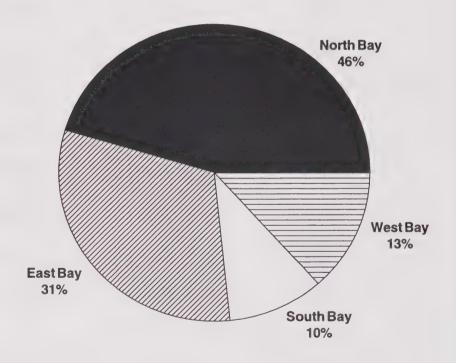


Shifting Share of Developed and Available Acres

Developed Acres 1990



Acres Available for Development 1990 - 2010



North Bay = Napa, Solano, Sonoma; East Bay = Alameda, Contra Costa; South Bay = Santa Clara; West Bay = Marin, San Francisco, San Mateo



Housing Unit Supply and Projected Household Growth

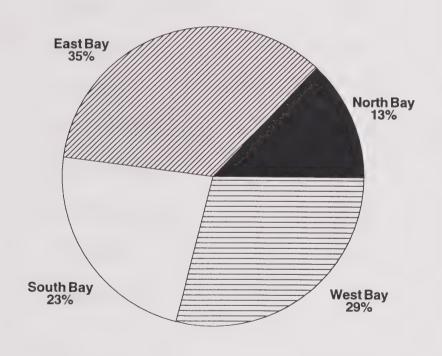
	1990 -	1990 - 2010 Forecast Period				
County	Total Unconstrained Unit Potential	Projected Household Growth	Unit Potential Less New Households	Additional Unit Potential		
Alameda	102.1	96.5	5.7	1.8		
Contra Costa	166.3	113.7	52.9	1.4		
Marin	20.7	16.9	3.8	0.6		
Napa	16.3	13.1	3.2	0.5		
San Francisco	42.6	36.7	5.9	0.0		
San Mateo	31.5	33.4	-1.9	4.7		
Santa Clara	120.6	109.4	11.2	3.6		
Solano	63.2	66.2	-3.0	4.9		
Sonoma	56.2	59.9	-3.6	5.5		
Region	619.5	545.8	73.7	23.0		

Numbers are in 000s.

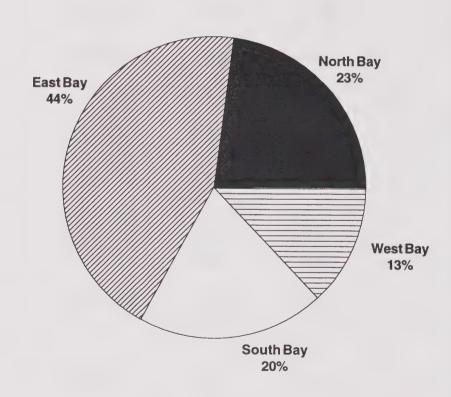


Location of Existing Households Versus New Unit Potential

Existing Households 1990



New Unit Potential 1990 - 2010



North Bay = Napa, Solano, Sonoma; East Bay = Alameda, Contra Costa; South Bay = Santa Clara; West Bay = Marin, San Francisco, San Mateo



Land for Employment Activity: Supply and Demand 1990 - 2010

County	Gross Acres Available (000s)	Density (Emp/Acres)	Projected Job Demand	Acres Needed (000s)	Acres Remaining (000s)
Alameda	11.1	43	178,900	4.2	7.0
Contra Costa	10.6	38	125,000	3.3	7.4
Marin	4.5	34	27,300	0.8	3.7
Napa	3.3	25	24,700	1.0	2.3
San Francisco	0.1	1,200	85,600	0.1	0.0
San Mateo	3.9	50	74,400	1.5	2.4
Santa Clara	10.1	50	182,300	3.7	6.4
Solano	11.6	25	75,500	3.0	8.6
Sonoma	3.0	31	87,400	2.8	0.1
Region	58.1	43	861,000	20.3	37.8

Numbers are independently rounded.



Jobs/Housing Balance:

Comparison of Projected New Jobs and Employed Residents 1990 - 2010

Due to lower job forecasts, ABAG projects a better future regional balance of new jobs and employed residents:

New Jobs	Growth in Labor Supply	Labor Needs From Outside Region	Ratio of New Jobs to New Emp. Res.
861,000	737,200	123,800	1.2 to 1

Fraction of New Jobs potentially needing to be filled by persons living outside the nine-county region.

Projections 90	1/3
Projections 92	1/4
Projections 94	1/7

Annual Average Housing and Household Growth in San Francisco Bay Region

		Historical	cal Projected		
	1960 - 1970	1970 - 1980	1980 - 1990	1990 - 1995	1995 - 2010
Housing Units	37,719	43,615	30,398	?	?
Households	37,875	41,775	27,570	24,950	28,750



Regional Population and Household Differences for 1990-2010

	Projections 90	Projections 94
Net Population Growth (000s)	1,060.7	1,512.1
Net Household Growth (000s)	515.9	545.8
Average Household Size Assumption	n 2.62	2.68

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Focus on Housing:

What do Recent Trends & the Projections Tell Us About Housing Supply & Demand?

Importance of Housing to the Bay Area Economy

An adequate supply of housing--the single most important requirement for a healthy regional economy

Between 1978 and 1990, the (CPI) rose by: 105 %

By comparison, Bay Area housing costs rose by:

 Insufficient housing supply and high housing costs hurt California's economic competitiveness

Inter-relationship between the current economic downturn and the housing industry

 The housing industry provides direct construction jobs and a strong economic multiplier



Trends in Income and Income Distribution

Declines in Real Income

Real income in the Bay Area declined by 5.7% from 1990 to 1993

Lower Forecasts of Future Income Growth

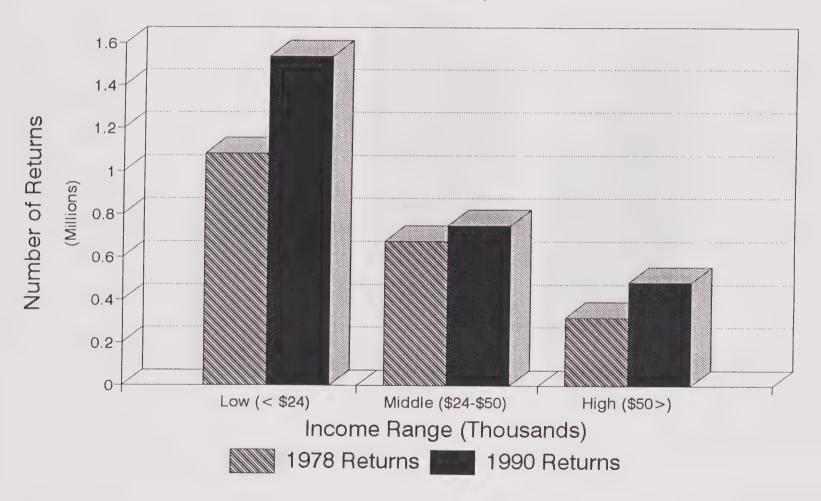
Projections 94 household income forecast is down by 3%

Increasing Gap Between Rich and Poor

- Tax returns in the lowest and highest income categories outpace middle income categories
- Increasing gap between mean and median incomes

Bay Area Individual Tax Returns By Income Class in 1978 and 1990

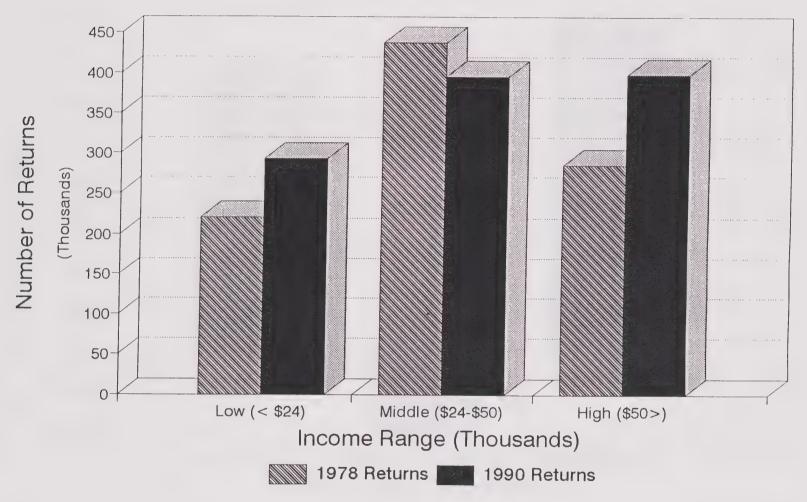
Constant 1985 \$



Source: California Franchise Tax Board; ABAG; Trends in Income; 1993

Bay Area Joint Tax Returns By Income Class, in 1978 and 1990

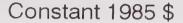
Constant 1985 \$

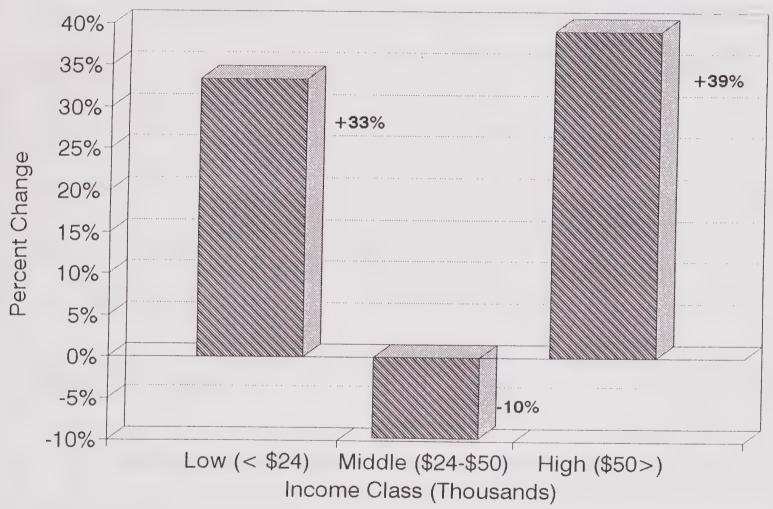


Source: California Franchise Tax Board

ABAG: Trends in Income; 1993

Change in Bay Area Joint Tax Returns By Income Class, % Change 1978 - 1990



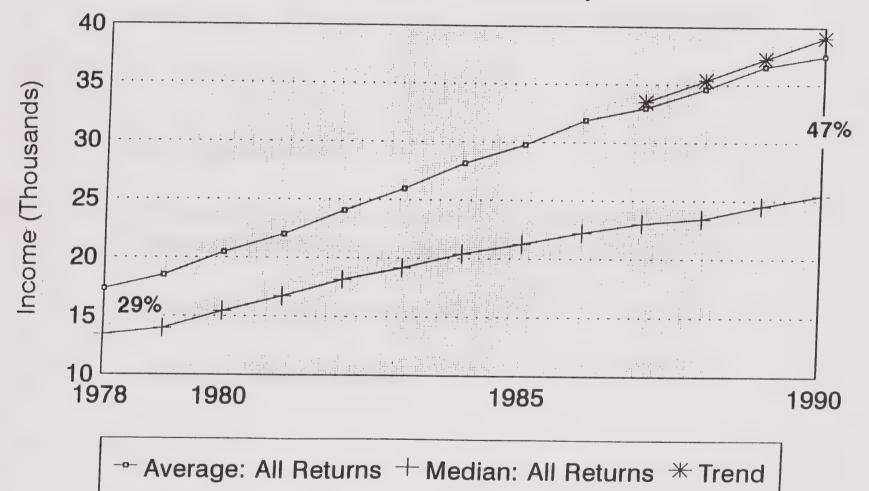


Sourece: California Franchise Tax Board; ABAG; Trends in Income; 1993



Growing Spread Between Mean and Median Bay Area Tax Returns

Current \$ (In Thousands)



Source: California Franchise Tax Board



Trends in Income and Income Distribution

(Continued)

Causative Factors

- Economic restructuring--relative declines in manufacturing and other traditional "middle income" job sectors
- Changing financial reward structure
- Changing demographics

Implications

Obvious social implications

Increasing polarization among the "haves" and "have nots"

Implications for housing

- Lower % of population will be able to afford a single family home
- A changing economic distribution, as well as household characteristics, call out for broader diversity in housing unit types
- Need for more affordable units (historically underbuilt)

Prognosis: Some Good News, Some Cause for Concern

Positive

- Historically low interest rates & soft housing prices, mean improved housing affordability.
- A community of highly trained, active nonprofit housing providers.

Negative

- NIMBY syndrome is alive and well
 - Most recent election proved discouraging in terms of voter-acceptance of the need for more affordable housing.
 - For example, 60% of voters voted "no" on Proposition 168, which would have made it possible for communities to approve some federally subsidized developments without a local vote.



Policy Recommendations

Local Level

- Encourage a diversity of unit types
- Expect increasing market shares for more affordable unit types
- Public education campaigns:
 - on need for adequate and affordable housing supply
 - to ease negative stereotypes

Policy Recommendations

State and Regional Level

- Sell policy makers on the idea that increasing housing supply and affordability must be part of economic recovery package
- Investments needed to secure good paying jobs:
 - in education
 - in job training
 - in infrastructure
- Reverse ethnic and racial segregation/ ensure equal access to resources
- Reform current California property and sales tax systems which do not support housing



Projections in Context: Key Policy Issues

Projections can override local policies in the long term

Relationship of ABAG Projections to local general plans

- General plan is a vision document
- ABAG incorporates GP land use inventory, not necessarily local forecasts
- ABAG's responsibility is to look at GPs in relation to each other

Vehicle for debate

Projections can clarify a need / desire to plan for a different future



Challenges and Obstacles Ahead

"Organizations don't change until external catastrophes bring them near the edge of annihilation."

George Bennett

Symmetric, Inc.

Restructuring — Period of Adjustment

High Technology	1985 - 1996
Communications	1988 - 1994
Finance, Insurance and Real Estate	1988 - 1995
Retail Trade	1989 - 1996
Health Services	1990 - 1998
Business and Office Services	1991 - 1997

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PROBLEM

Changing the way we think:

MANAGING
A TURBULENT FUTURE

ISSUES

- Coming to grips with a truly multi-cultural society
- Slower income growth will affect housing types and overall demand
- Re-structuring service delivery by government
- Creating quality education: the only answer

CHALLENGES

- Consensus-building
- Re-orienting planning
- Understanding that quality costs
- Thinking long-term

San Francisco Bay Region County Growth: 1990 - 2010

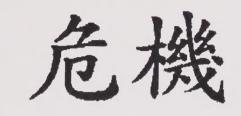
Population	1990 - 2010 Change	Households	1990 - 2010 Change	Employed Residents	1990 - 2010 Change	Jobs	1990 - 2010 Change
Santa Clara County	315,523	Contra Costa County	113.732	Contra Costa County	155,949	Santa Clara County	182,250
Contra Costa County	300,968	Santa Clara County	109,420	Santa Clara County	155,555	Alameda County	178,920
Alameda County	270,298	Alameda County	96,452	Alameda County	128,139	Contra Costa County	124,980
Solano County	206,379	Solano County	66,161	Solano County	90,481	Sonoma County	87,390
Sonoma County	151,378	Sonoma County	59,859	Sonoma County	75,113	San Francisco County	85,560
San Mateo County	99,777	San Francisco County	36,716	San Francisco County	50,308	Solano County	75,460
San Francisco County	95,041	San Mateo County	33,426	San Mateo County	48,074	San Mateo County	74,420
Marin County	40,204	Marin County	16,924	Marin County	17,821	Marin County	27,300
Napa County	32,535	Napa County	13,098	Napa County	15,717	Napa County	24,670
	1990 - 2010		1990 - 2010		1990 - 2010		1990 - 2010
	Percentage		Percentage	Employed	Percentage		Percentage
Population	Change	Households	Change	Residents	Change	Jobs	Change
Solano County	61 %	Solano County	58 %	Solano County	56 %	Solano County	63 %
Sonoma County	39 %	Sonoma County	40 %	Sonoma County	39 %	Sonoma County	57 %
Contra Costa County	37 %	Contra Costa County	38 %	Contra Costa County	38 %	Napa County	52 %
Napa County	29 %	Napa County	32 %	Napa County	30 %	Contra Costa County	41 %
Alameda County	21 %	Santa Clara County	21 %	Alameda County	20 %	Alameda County	29 %
Santa Clara County	21 %	Alameda County	20 %	Santa Clara County	19 %	Marin County	27 %
Marin County	17 %	Marin County	18 %	Marin County	14 %	San Mateo County	23 %
San Mateo County	15 %	San Mateo County	14 %	San Mateo County	14 %	Santa Clara County	21 %
San Francisco County							



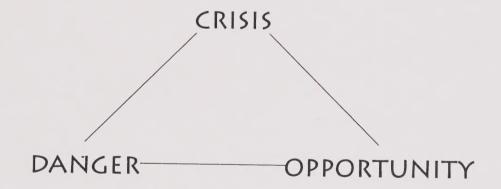
San Francisco Bay Region Highest Growing Subregional Study Areas: 1990 - 2010

POPULATION	1990-2010 CHANGE	HOUSEHOLDS	1990-2010 CHANGE	EMPLOYED RESIDENTS	1990-2010 CHANGE	JOBS	1990-2010 CHANGE
Can lase	170 001	San Jose	EE 004	San Jose	02.260	San Jose	94,150
San Jose San Francisco	170,821	San Francisco	55,881 36,716	San Francisco	83,368	San Francisco	85,560
	95,041	Fairfield	,	Fairfield	50,308	San Francisco Santa Rosa	37,660
Fairfield	70,144		21,778		30,842		,
Santa Rosa	50,999	Santa Rosa	19,414	Antioch	25,870	Fremont .	37,400
Rural East C. C. Co.	50,389	Antioch	18,011	Santa Rosa	25,624	Fairfield	25,810
Antioch	50,138	Rural East C. C. Co.	16,706	Rural East C. C. Co.	24,749	Dublin	24,860
Vacaville	47,754	Vacaville	14,900	Dublin	22,572	Pleasanton	24,650
Dublin	42,692	Livermore	14,102	Livermore	21,574	Vacaville	24,590
Livermore	40,489	Dublin	14,046	Vacaville	20,891	Oakland	22,300
Oakland	34,358	Hayward	11,467	Pleasanton	16,694	San Ramon	19,390
Brentwood	33,885	Pleasanton	11,190	Remainder	16,466	Livermore	18,310
Gilroy	31,785	Brentwood	11,132	Gilroy	16,110	Concord	17,220
Remainder	29,545	Fremont	10,802	Hayward	16,041	Milpitas	16,900
Fremont	29,361	Remainder	10,389	Brentwood	15,460	Santa Clara	16,850
Hayward	28,844	Gilroy	10,267	Fremont	13,521	Richmond	16,400
Pleasanton	28,362	Pittsburg	9,160	Oakland	13,106	Rohnert Park	16,400
Pittsburg	25,670	Sunnyvale	9,159	Pittsburg	12,510	Gilroy	15,740
	1990-2010		1990-2010		1990-2010		1990-2010
	PERCENTAGE		PERCENTAGE	EMPLOYED	PERCENTAGE	•	PERCENTAGE
POPULATION	CHANGE	HOUSEHOLDS	CHANGE	RESIDENTS	CHANGE	JOBS	CHANGE
			750.0/		525 %	Name Aiment Ind. Areas	1600 %
Remainder	584 %	Remainder	758 %	Remainder		Napa Airport Ind. Areas	
Remainder Rio Vista	584 % 487 %	Remainder Rio Vista	501 %	Remainder Rio Vista	475 %	American Canyon	643 %
			501 % 347 %	Rio Vista Brentwood	475 % 348 %		643 % 488 %
Rio Vista	487 %	Rio Vista	501 %	Rio Vista	475 %	American Canyon	643 %
Rio Vista Brentwood	487 % 345 %	Rio Vista Brentwood	501 % 347 %	Rio Vista Brentwood	475 % 348 %	American Canyon Windsor	643 % 488 %
Rio Vista Brentwood Dublin	487 % 345 % 183 %	Rio Vista Brentwood Dublin	501 % 347 % 206 %	Rio Vista Brentwood Dublin	475 % 348 % 205 %	American Canyon Windsor Brentwood	643 % 488 % 410 %
Rio Vista Brentwood Dublin Rural East C. C. Co.	487 % 345 % 183 % 173 %	Rio Vista Brentwood Dublin Rural East C. C. Co.	501 % 347 % 206 % 166 %	Rio Vista Brentwood Dublin Rural East C. C. Co.	475 % 348 % 205 % 169 %	American Canyon Windsor Brentwood Rural East C. C. Co.	643 % 488 % 410 % 373 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor	487 % 345 % 183 % 173 % 127 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor	501 % 347 % 206 % 166 % 138 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale	475 % 348 % 205 % 169 % 131 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto	643 % 488 % 410 % 373 % 311 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale	487 % 345 % 183 % 173 % 127 % 120 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale	501 % 347 % 206 % 166 % 138 % 130 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor	475 % 348 % 205 % 169 % 131 % 130 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City	643 % 488 % 410 % 373 % 311 % 195 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay	487 % 345 % 183 % 173 % 127 % 120 % 103 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay	501 % 347 % 206 % 166 % 138 % 130 % 104 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor Half Moon Bay	475 % 348 % 205 % 169 % 131 % 130 % 98 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City Hercules Dublin	643 % 488 % 410 % 373 % 311 % 195 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Remainder	487 % 345 % 183 % 173 % 127 % 120 % 103 % 97 % 89 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Clayton	501 % 347 % 206 % 166 % 138 % 130 % 104 % 102 % 96 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor Half Moon Bay Gilroy Clayton	475 % 348 % 205 % 169 % 131 % 130 % 98 % 95 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City Hercules	643 % 488 % 410 % 373 % 311 % 195 % 195 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon	487 % 345 % 183 % 173 % 127 % 120 % 103 % 97 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon	501 % 347 % 206 % 166 % 138 % 130 % 104 % 102 % 96 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor Half Moon Bay Gilroy	475 % 348 % 205 % 169 % 131 % 130 % 98 % 95 % 93 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City Hercules Dublin Morgan Hill	643 % 488 % 410 % 373 % 311 % 195 % 195 % 191 % 152 % 149 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Remainder Gilroy Fairfield	487 % 345 % 183 % 173 % 127 % 120 % 103 % 97 % 89 % 88 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Clayton Gilroy	501 % 347 % 206 % 166 % 138 % 130 % 104 % 102 % 96 % 96 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor Half Moon Bay Gilroy Clayton American Canyon Remainder	475 % 348 % 205 % 169 % 131 % 130 % 98 % 95 % 93 % 93 % 90 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City Hercules Dublin Morgan Hill Vacaville Rohnert Park	643 % 488 % 410 % 373 % 311 % 195 % 195 % 191 % 152 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Remainder Gilroy Fairfield Clayton	487 % 345 % 183 % 173 % 127 % 120 % 103 % 97 % 89 % 88 % 88 % 86 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Clayton Gilroy Remainder Fairfield	501 % 347 % 206 % 166 % 138 % 130 % 104 % 102 % 96 % 96 % 94 % 83 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor Half Moon Bay Gilroy Clayton American Canyon Remainder Antioch	475 % 348 % 205 % 169 % 131 % 130 % 98 % 95 % 93 % 93 % 90 % 86 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City Hercules Dublin Morgan Hill Vacaville Rohnert Park Gilroy	643 % 488 % 410 % 373 % 311 % 195 % 191 % 152 % 149 % 136 % 116 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Remainder Gilroy Fairfield Clayton Half Moon Bay Uninc.	487 % 345 % 183 % 173 % 127 % 120 % 103 % 97 % 89 % 88 % 88 % 86 % 81 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Clayton Gilroy Remainder Fairfield Antioch	501 % 347 % 206 % 166 % 138 % 130 % 104 % 102 % 96 % 96 % 94 % 83 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor Half Moon Bay Gilroy Clayton American Canyon Remainder Antioch Morgan Hill	475 % 348 % 205 % 169 % 131 % 130 % 98 % 95 % 93 % 93 % 90 % 86 % 80 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City Hercules Dublin Morgan Hill Vacaville Rohnert Park Gilroy Antioch	643 % 488 % 410 % 373 % 311 % 195 % 191 % 152 % 149 % 136 % 111 %
Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Remainder Gilroy Fairfield Clayton	487 % 345 % 183 % 173 % 127 % 120 % 103 % 97 % 89 % 88 % 88 % 86 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Windsor Cloverdale Half Moon Bay American Canyon Clayton Gilroy Remainder Fairfield	501 % 347 % 206 % 166 % 138 % 130 % 104 % 102 % 96 % 96 % 94 % 83 %	Rio Vista Brentwood Dublin Rural East C. C. Co. Cloverdale Windsor Half Moon Bay Gilroy Clayton American Canyon Remainder Antioch	475 % 348 % 205 % 169 % 131 % 130 % 98 % 95 % 93 % 93 % 90 % 86 %	American Canyon Windsor Brentwood Rural East C. C. Co. East Palo Alto Suisun City Hercules Dublin Morgan Hill Vacaville Rohnert Park Gilroy	643 % 488 % 410 % 373 % 311 % 195 % 191 % 152 % 149 % 136 % 111 % 107 %





Pronounced "way-gee"



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